

**COAST ACTION GROUP  
P.O. BOX 215  
POINT ARENA, CA 95468**

May 30, 2007

Tam Doduc, Chair  
State Water Resources Control Board  
P.O. Box 100  
Sacramento, California, 95812-0100



**Subject: Comment - SWRCB Water Code Enforcement Policy - Diversion and maintenance of instream flows.**

Over the years Coast Action Group has approached the Board on issues related to Water Code and protection and recovery of Beneficial Uses. The subject(s) included: Flow policy on TMDLs (Shasta, and Scott Rivers), State authority on river under flow (Gualala River/North Gualala Water Company SWRCB Decision), Complaints on illegal diversion and transfers, Protest of Water Rights expansion, Comment on the TU/Peregrine Petition, and on pollution problems exacerbated by low flows.

In all of these cases and issues flows were, and are, a crucial factor.

You can not maintain and recover beneficial uses without water in the stream to support them.

Fish (in this case salmon) and other aquatic species need specific habitat and temperature conditions for survival. These conditions, to a large extent, are flow related.

Appropriate beneficial riparian and wetland conditions will not exist without a base line stream flow.

All of CAG's historic testimony and actions are related to the issue of flow.

It has been pointed out by your staff that flow is not the only issue. This is true. Other habitat conditions must exist as well as flow. But, without flow(s) there is no chance of maintaining and recovering beneficial uses.

Please accept, in part, the attached documents as flow related discussion for your consideration.

Sincerely,  
Alan Levine  
For Coast Action Group

**COAST ACTION GROUP  
P.O. BOX 215  
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March 30, 2005

**April 15 COMMENT DEADLINE**

Art Baggett, Chair  
State Water Resources Control Board  
1 P.O. Box 100  
Sacramento, California, 95812-0100

**Subject: Comments** - Petition Submitted by Trout Unlimited and Peregrine Chapter of the National Audubon Society and March 17th Workshop on the Petition - Stream Diversion Policy.

Dear Chairperson Baggett and Board Members:

**General**

You interest and attention to this matter is very much appreciated. The obvious general consensus is indicated by all parties participating in the workshop is that we all understand that there is a problem with permitting and enforcement in stream diversion oversight by the Division of Water Rights. There was no argument with the fact that public trust values are not being protected given the current status of SWRCB (Division of Water Rights) implementation of permitting and review process. The primary question, from the Board and other interested parties, is "How are we going to implement and enforce appropriate policy and State Water Code, given the resources at hand?"

With that question in mind, Coast Action Group supports the Petition and associated remedies noted in the Petition. In making this statement, and given the limited resources at hand for implementation at the Division of Water Rights (SWRCB), and other participating responsible agency; there are many areas where cost effective solutions are available. Employment of these solutions will help resolve outstanding issue (noted in the Petition) in complying with State Water Code and other Public Resources Code and, also, provide for better protection of these public trust resources - water, aquatic life, and fish.

You should be constantly reminded; in the words of our Governor: "Water is our future."

Problems of policy implementation can be separated into basic areas: Large Projects that have ongoing permits, permit renewal or license challenges/protests, Small projects with permits/license, Small projects without permit/licence, Complaints, and Projects that are ignored to

this point. The following is a discussion of some remedies and policy ideas related to these various classes of issue:

### **Large Projects that have ongoing permits, permit renewal or license challenges and or protests**

Coast Action Group has no expertise in this area. However some issue in this class is evident from a management point of view. These large projects require in-depth environmental review and extensive long term participation from staff and multi-agency coordination. Significant resources are required in resolution. The best suggestion that Coast Action Group can offer is better coordination of participating responsible agency in addressing issue.

### **Small projects without permits/license - or permits/license applied for and pending**

There are thousands of unpermitted and unlicensed diversions or impoundments currently extant. While individually the impact of one such small diversion or impoundment may be small, cumulative the aggregate the impact of such diversions and impoundment is huge - a devastating factor in the management of water resources for the protection of fish and aquatic life.

Implementation of the joint NMFS (NOAA Fisheries)/DFG Guidelines for Maintaining Instream Flows is neither impossible nor costly for responsible agency in the case of these unpermitted or permit/ license applied for cases. In fact, implementation of the "Guidelines" would go a very long way in addressing problems related to illegal use and maintaining instream flows. The basic theory of the "Guidelines" is that water is diverted, allowing for some by-pass flow, during period of high flows and retained (impounded) for use during critical low flow periods. This seems logical, not rocket science, and within the realm of possibility - in most cases - as a condition of permit/license.

It does not seem that difficult a task to notice those applying for permits or license that if they desire same that they must conform to the "Guidelines" by agreement and condition of permit/license. Failure to agree to and demonstrate compliance, on paper and physically, should subject any party diverting or impounding water without a permit/license to a cease and desist order - with applicable penalty. When faced with the probability of not getting their water, or permit/license, most parties needing to irrigate will conform quite readily.

Division of Water Rights has not approached this problem by processing permits/licenses with the conditions attached to permits/licenses that incorporate the "Guidelines". It is suggested that the Division of Water Rights can immediately notice applicants of required conditions so that the applicants can take action.

The financial burden to accomplish this remedy is minimal.

### **Small projects with permits/license**

Small projects with permits/license probably can not be forced to adopt new conditions - "Guidelines".

However, notice can be sent requesting voluntary compliance.

Any small project that is found to be violation of their permit/license, or in violation of State Water Code or Fish and Game Code where the method of diversion or amount of use is a threat to or is damaging public trust values is subject to permit revocation and/or modification. In many of these cases the "Guidelines" can be applied to mitigate and bring out of compliance diversion/impoundment into compliance with conditions of "Guidelines" incorporated.

### **Coho Recovery Guidelines**

The Board members at the workshop were interested in the availability of the Department of Fish and Game (a co-responsible agency - beneficial uses/fish and aquatic species) to work with the SWRCB/Division of Water Rights on enforcement and resolution of related (and/or multi-jurisdictional) issues.

The following statement represents the intent of the Recovery Strategy for California Coho Salmon (DFG 2004):

*"The Department of Fish and Game shall review all proposed water diversions and provide recommendations to protect aquatic habitat which provides for all coho salmon life stages. Where appropriate, these recommendations will be consistent with the July 17, 2002 draft of the proposed National Marine Fisheries Service/CDFG joint guidelines for maintaining instream flows to protect fisheries in mid-California coastal streams. The Recovery Plan shall include a strategy to maintain or recover instream flow throughout the region adequate to facilitate recovery of coho."*

Please reference Coho Recovery Strategy language in Appendix. This language, as well as SWRCB basic responsibility as a responsible agency to protect beneficial uses and public trust resources, supports implementation of actions by the SWRCB requested by the Petition - including use of "Guidelines".

**Note: Coho salmon are now effectively listed under CESA.**

All responsible agency must cooperate, and employ reasonable standards (including State Resources and Water Code) for coho recovery under this listing.

### **Complaints**

Not only are permit/license applications not processed in reasonable periods of time; Complaints and other enforcement issue reside, unresolved, in the pile of things to do for unreasonably extended periods of time.

### **Examples of Regional Issues**

The summarization of the two issues, below, give some idea of how the lack of enforcement plays into conditions that are limiting factors for beneficial uses - community water sources, fisheries, and aquatic life.

#### **Gualala - North Gualala Water Company - Diversion for Vineyard use.**

In the case of the North Gualala Water Company the SWRCB was successful in asserting authority, over challenges by the water company, in maintaining instream flows. The water company claimed that SWRCB had no jurisdiction- due to claim of percolating ground water. The file showed, and the Court found, that there was hydrologic connection with subsurface flows in a confined channel. Thus, the SWRCB has authority to enforce minimum by-pass flow standards.

The minim by-pass flow condition of permit/license is 4 cfs - during critical low flow periods. During years of low rainfall this by-pass flow is continually violated by the water company. The SWRCB has not taken action to enforce provision of the permit. To guarantee supplies during low flow periods the water company would, and should, develop alternative water sources. In this case to support beneficial use protection via compliance with permit/license conditions, the SWRCB should give notice of intent to enforce permit conditions and encourage the water company to move forward with development of alternative water sources.

Currently Gualala River basin is experiencing massive conversions of timber production land to vineyard use. Nearly 1,000 acres applied for or approved to date with a massive 1,900 acre project in the wings. With grape plantings at 1,200 to 2,000 vines per acre (minimum, it can be up to 3,000 or more), and water use per plant from 1/2 to 1 gallon per day. Using simple math you can see that there is additional massive diversion potential and use of water. Water diverted from streams and watercourses, and in some cases impounded, will be sought for irrigation of these newly developed vineyards. This will put additional strain on the water resources of the Gualala River.

Conservation and implementation of "Guidelines" is mandated for protection of the Beneficial Uses of Water. Failure to address issues related to the water company will only expand the problems related to water use.

The solutions are well within the grasp of the SWRCB. Action, in terms of policy implementation, would better serve the resource and the agency if initiative is taken now rather than later. SWRCB actions must be consistent with DFG Recovery Strategy for California Coho Salmon. See Appendix - **8.2.1.7 Gualala River HSA**

#### **Garcia - Stornetta Complaint - License 6470 (Application 16700)**

In August of 2003 formal complaint was filed with the division of water rights. A riparian license with specific diversion limits is extant. The complaint asserts, and all information in the file (pumping electric bills, point of diversion, pump capacity, areas of irrigation) supports findings that water diverted is grossly in excess of permit/license and that 1/3 of all the total use is transferred to another basin outside of the use area of the riparian license. The dairy has claimed that there is no state authority via the use of the percolating ground water argument. All information, geology, hydrology, well pumping tests, show hydrologic connectivity with subsurface flow in a confined channel.

Given this information, the Division of Water Rights has yet to make a finding and enforce the conditions of the License.

## **Conclusion**

In support of the issues raised in the Petition, it is reasonable to expect that action can be taken in areas discussed above. Cost effective actions, including implementing the "Guidelines" on pending (or out of compliance) permits/licenses are well within the realm of possible responsible action by the SWRCB.

Sincerely,

For Coast Action Group

## **Appendix - Wording from CDFG Coho Recover Strategy**

### **COHOSALMONRECOVERYSTRATEGY 7.1**

#### **7.1 STREAMFLOW**

**RW-I-B-01** Encourage the use of passive diversion devices designed to allow diversion of water only when minimum flow requirements are met or exceeded. Identify and develop adequate passive diversion structure designs.

**RW-I-C-01** Encourage cooperative effort to plan water supply development and growth that are not harmful to coho salmon habitat. Work in coordination with the California Department of Housing and Community Development, Association of Bay Area Governments, counties, cities, water districts, and others. Provide funding and education to accomplish this.

**RW-I-D-01** Encourage elimination of unnecessary and wasteful use of water from coho salmon habitat, through education components of this strategy. Encourage water conservation for existing uses.

**RW-I-D-02** Improve coordination between agencies to avoid and minimize the adverse effects of future or reopened permits and licenses for water diversions on coho salmon. Promote consistency and pool limited resources to implement a regional interagency task force for regional project review (water rights, 1600, CESA). Include staff that represent the Department, SWRCB, RWQCB, NOAA Fisheries and, where applicable, other agencies. Where feasible, use programmatic, cost-efficient approaches and incentives to working with landowners to permit off-channel storage ponds. For the CCC Coho ESU, the SWRCB shall consider the June 23, 2002 Draft Guidelines developed by NOAA Fisheries and the Department in the water rights proceedings for streams with coho salmon including season of

diversion and off-stream storage, and maintenance of the natural hydrograph, where appropriate. Encourage NOAA Fisheries and the Department to work with SWRCB to modify the guidelines to be appropriate to the SONCC Coho ESU as needed.

**RW-I-D-03** Provide conservation incentives to minimize negative effects of water drafting for roads and fire suppression, including, but not limited to:

- a. Streamline permitting for actions that result in an improvement of instream flows;
- b. Support multiple uses of water storage systems ( e.g., USFS, CDF, counties, landowners); and
- c. Cost-share funding where low-flow, trickle recharge water storage is used to avoid adversely affecting streamflow or coho salmon habitat.

**RW-I-D-04** Evaluate the rate and volume of water drafting for dust control in streams or tributaries and where appropriate, minimize water withdrawals that could impact coho salmon. When feasible, use alternatives to water as a dust palliative (including EPA-certified compounds) that are consistent with maintaining or improving water quality.

**RW-I-D-05** Explore ways to improve implementation of the Department' Lake or Stream Alteration Notification and Agreement process to protect coho salmon from the adverse affects of projects that would alter the bed, banks, channel, or natural flow streams.

**RW-I-D-06** Pursue funding for the assessment, cataloging, and compliance monitoring of water diversions within the range of coho salmon. Upgrade the existing water rights information system so that water allocations can be readily quantified by watershed.

**RW-I-D-08** Support a comprehensive streamflow evaluation program to determine instream flow needs for coho salmon in priority watersheds.

## **7.2 WATER RIGHTS**

**RW-II-A-01** Review authorized diversions that have no provisions to protect coho salmon. Review should be conducted in order of priority for streams with coho salmon habitat.

**RW-II-A-02** Identify unauthorized diversions.

**RW-II-A-04** Where flows are a limiting factor in priority coho salmon habitat, petition the SWRCB to add streams to the Declaration of Fully Appropriated Streams.

**RW-II-A-05** Inventory water use and water availability in streams with coho salmon habitat. Ensure that water availability analyses on priority coho salmon habitat accurately reflect existing water use and availability. Require streamflow gauging devices on priority coho salmon streams when approving water development projects. Continue to require riparian and pre-1914 water users to file annual statements of diversion and use.

**RW-II-B-01** Pursue opportunities to acquire or lease water, or acquire water rights from willing sellers for coho salmon recovery purposes. Develop incentives for water right holders to dedicate instream flows for the protection of coho salmon (Water Code §1707).

**RW-II-B-02** Evaluate the cumulative effects to coho salmon from the creation of new riparian water rights associated with land subdivisions and rezonings. Where cumulative impacts on flows will be detrimental to coho salmon, consider mitigations or conditions that would protect coho salmon or avoid adverse effects to coho salmon. Conditions could include requirements that would not allow riparian water rights for new parcels at the time subdivision approvals are made.

**RW-II-B-03** Within the range and distribution of coho salmon, diversion screens should be constructed, repaired, upgraded, reconstructed, and maintained in accordance with Department/NOAA Fisheries Screening Criteria.

## **7.17 INTEGRATION WITH OTHER PLANS AND PROGRAMS**

**RW-XXXI-B-07** To minimize and reduce the effects of water diversions, direct the Department to work with the SWRCB, present supportive evidence, and actively participate in making recommendations needed to implement provisions of the FGC. This may include:

- a. Identifying and implementing actions to improve coordination between the agencies and others to address season of diversion, off-stream reservoirs, bypass flows protective of coho salmon and their habitat including spawning gravel and natural hydrograph, and avoidance of adverse impacts caused by water diversion;
- b. Funding of assessment and geographic information system (GIS) mapping of water diversions and determination and monitoring of FGC §1600 program compliance related to water diversions; and

**MC-GU-O3** Enforce existing bypass flow permit conditions of the SWRCB and the Department for the North Gualala Water Company diversion on North Fork Gualala



River.

c. Evaluating requests for on-stream dams on coho salmon streams above migratory reaches for the effects on the natural hydrograph and the effects on the supply of spawning gravel for recruitment downstream.

#### **7.20 ENFORCEMENT OF EXISTING LAWS**

**RW-XXXIII-A-01** Support enforcement of existing laws, codes, regulations, and ordinances that address the protection of coho salmon and their habitat. Habitat includes but is not limited to water (quality and quantity), pools, riffles, instream LWD, riparian vegetation and estuaries. Existing laws, codes, regulations, and ordinances include, but are not limited to FGC §§1600, 5650, 5900 through 6100 (with an emphasis on 5901, 5937, and 6100), PRC §§ 10000-10005, CESA, and the ESA. The term "" includes, but is not limited to, education, issuing warnings, issuing citations, developing cases for referral to district attorneys offices and/or the Office of the Attorney General.

**RW-XXXIII-A-02** Provide adequate budgetary funding and positions for agencies with enforcement authority to enforce laws and codes relevant to coho salmon protection.

**RW-XXXIII-A-03** Review diversions and use of water in priority coho salmon streams to determine which permits and/or licenses need modification for the protection of coho salmon. Where necessary, formally request that the terms of water rights permits/licenses be modified for protection of coho salmon. This will require field studies to evaluate impacts and develop supportive evidence and formal hearings to consider proposed changes. This program must be adequately funded to be implemented.

**RW-XXXIII-A-04** Agencies with the primary authority for fish and water should lead enforcement efforts and coordinate with all local, State and Federal agencies with regulatory authority affecting coho salmon.

**RW-XXXIII-A-05** Request that enforcement to prevent unauthorized diversion and use of water and water permit processing a high priority. Enforcement of existing codes including Water Code §§1052 Trespass and 1831 *et seq.*, Cease and

#### **8.2.1.7 Gualala River HSA**



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December 8, 2006

Bruce Ho  
Regional Water Quality Control Board  
North Coast Region  
5550 Skylane Blvd.  
Santa Rosa, CA

**Subject: Stream and Wetlands System Protection Policy, Proposed Basin Amendment - Initial Comments**

**General**

Coast Action Group appreciates that the Regional Board recognizes the necessity for taking such action as described in the proposed project, Stream and Wetlands Protection Policy, and making an effort to move forward with such policy. The proposed protection policy is appropriate and indicated by the acknowledged loss and degradation of wetlands and near stream riparian areas leading to a loss in water quality - non-attainment of Water Quality Standards resulting in the listing of most north coast rivers as impaired on the State of California Impaired Water Quality Limited Segments/CWA 303(d) list.

The Regional, and State, Water Quality Control Board(s) have the responsibility to manage the State's water resources to meet Water Quality Objectives and protect the Beneficial Uses described in the Basin Plan. Impaired listing status and degraded resources necessitate action plans, including Basin Plan amendments, to address the issue of attainment of desired goals.

The regional planning bodies, Counties and Cities in Region 1, have not successfully addressed issue through their own regional planning mechanisms (i.e. General Plans and GP updates, and Zoning Code, Ordinance, Stormwater Plans, and NPDES permits). The these planning bodies have sought (they say) guidance from the Regional Board in the development of stream and wetland protection policy. In some cases the planning bodies have claimed that the Regional Board was derelict in providing guidance. The proposed Basin Plan amendment to protect wetlands and riparian areas would serve to clarify what actions these planning bodies should employ regarding the management these resources in their specific areas of responsibility. The proposed Basin Plan amendment can also serve to provide standards and criteria for all land use types that can have effect and water quality and wetland values as a result of their specific use.

## **Impaired Waterbodies and the Basin Plan**

As mentioned above, most of the north coast rivers are listed impaired for the pollutants sediment, temperature, nutrients, and the lack of Dissolved Oxygen. There are many other north coast streams that are impaired but are not listed. These impaired listings, where Beneficial Uses are not being supported, are a result of inappropriate land use. In many cases (at least 50%) on these impaired rivers forest practices is the primary land use and degradation (riparian loss) from inappropriate practices is the major contributor to failure of riverine function. On the remainder of the impaired rivers it is a combination of poor timber harvest practices, poor agricultural practices (grazing and growing), and urbanized land use with poor pollution controls that has contributed to diminished riparian capacity.

The EPA promulgated TMDLs on the Albion, Gualala, Noyo, Ten Mile, and other rivers on the north coast has documented impacts, including loss of riparian function, on these waterbodies. State promulgated TMDLs for the Garcia, Scott, and Shasta Rivers have also provided such documentation. However, none of these TMDLs or approved Action Plans have set appropriate criteria and objectives and land use guidelines to support attainment of riparian function - or - improvement of riparian function.

Stream and Wetlands protection policy should take the findings of these TMDLs to make determinations regarding the policy that will be issued for such resource protection. This policy is consistent with Basin Plan Objectives and Anti-degradation policy which states:

***Basin Plan Anti-degradation Policy:*** "Controllable water quality factors shall conform to the water quality objectives contained [in the Basin Plan]. When other factors result in the degradation of water quality beyond the levels or limits established [in the Basin Plan] as water quality objectives, then controllable factors shall not cause further degradation of water quality. Controllable water quality factors are those actions, conditions, or circumstances resulting from man's activities that may influence the quality of waters of the State and that may reasonably be controlled."

Riparian attributes are both measurable and controllable factors that can be addressed via the proposed Stream and Wetlands System Protection Policy.

The fact that degradation that has occurred under existing Basin Plan prohibitions indicates that additional prohibitions (control language) are necessary. This is supported by the findings of the above mentioned TMDLs indicating that specific land use practices are responsible for diminished riparian and water quality values. Also, the fact that recently approved Shasta and Scott River TMDLs and Action Plans are dependent on the development of such policy to be truly functional.

## **Limiting Factors and Desired Riparian Conditions**

In consideration of why such policy development is needed (aside from the fact that WQ values are not improving and are documented to be not sufficiently protected) it would be helpful to develop a matrix of Limiting Factors effecting near stream health and also a similar matrix for

Desired Conditions. Such matrix would be helpful in near stream condition analysis and policy development. Such matrix can support modeling the relationship, interaction, of factors involving the stream channel, flood plain, and riparian function. Comparison of desired condition to actual function can be made with findings relevant to the causal relationships. Attributes of such matrix can be useful in developing new standards for Water Quality Objectives (numeric and narrative). Hydrologic issues can be linked to such matrix and related policy and language needs for policy development and addressing needs for new Water Quality Objectives (and/or prohibitions) to be amended into the Basin Plan.

This discussion is applicable to all attributes: **Riparian Vegetation and Buffer Width** - effects: stabilization, filtration, habitat, temperature and micro-climate, filtration; **Flood plain** - effects: storage capacity, changes in hydrology and related effects up and down the system, habitat, ground water storage, interface with instream flows, **Active Channel** - effects: alteration and changes in dynamics, **Hydrology** - effects: land use and water flow changes, peak flows (changes in hydrologic incidence and time [lag time] to peak flow).

Assessment of stream habitat conditions would benefit from both a Limiting Factors and a Desired Conditions matrix.

## **BMPs**

The above mentioned regional planning authorities and mechanisms often mention use of BMPs to protect water quality values. However, a description of what actually constitutes a BMP is usually missing in the planning authority's lexicon.

**Recommendation: The Regional Board provide a description of what BMPs for various land use operations that potential effect streams and wetlands might look like.**

Information for the BMP assessment or formulation can be obtained from:

"Riparian Setbacks: Technical Information for Decision Makers"  
[http://www.crw.org/pdf\\_files/riparian\\_setback\\_paper\\_jan\\_2006.pdf](http://www.crw.org/pdf_files/riparian_setback_paper_jan_2006.pdf)

"Riparian Buffer Width, Vegetative Cover, and Nitrogen Removal Effectiveness: A Review of Current Science and Regulations", <http://www.epa.gov/ada/download/reports/600R05118/600R05118.pdf>

**See also - Forest Practices specific discussion - below**

## **Forestry Practices**

It is unclear in the project description if the Stream and Wetlands Protection Policy is to cover areas of timber harvest operations. As noted, above and in many scientific studies, inappropriate timber harvest activity is responsible for water quality degradation through loss of riparian function. Recovery of water quality values, objectives, and beneficial use protection is dependent on sufficient riparian protection from further degradation.

**Please note, in reference to policy development discussion:** Report of the Scientific Review Panel On California Forest Practice Rules and Salmonid Habitat, Prepared for The Resources Agency of California and the National Marine Fisheries Service, comprised of a selected panel of scientists, 1999, indicates that "the Forest Practice Rules" and their administration by the California Department of Forestry "do not protect the beneficial uses of water." "Silviculture is the leading source of impairment to water quality in the North Coast of California. Related to these water quality problems, California has a number of species, in particular salmon, that are endangered threatened or otherwise seriously at risk, due in very significant part to forestry activities that impair their spawning, breeding and rearing habitat." (Findings for the California Coastal Non-point Program and CZARA Action Plan, USEPA/NOAA, 1999) A Scientific Basis for the Prediction of Cumulative Watershed Effects, UC, Berkeley, June 2001, and finally the Final Report on Sediment Impairment and Effects on the Beneficial Uses of Elk River and Stitz, Bear, and Jordan Creeks, Concur, 2002, also support the findings noted above. All of these noted scientific reviews indicate the Forest Practice Rules, including projects related to small landowners and Non-Industrial Timber Plans, are deficient in cumulative impacts analysis and riparian protection and can not be counted on to protect the beneficial uses of water and meet Basin Plan water quality objectives.

These documents, noted above, not only indicate impairment from current and historic forest practices, they provide analysis and prescriptive measures to be taken to address attainment of WQS. These studies indicate that level of disturbance is a major factor and needs to be addressed if we are ever going to meet WQS. These documents also indicate that loss of riparian function can be attributed to inadequate protections currently in the Forest Practice Rules.

Other references to review for appropriate regulatory guidelines are:

**Coho Recovery Guidelines (DFG)-** Regulations (not approved) specifically referenced for Timber Harvest activity in the form of an Incidental Take Permit (Draft 2112 - rules). The Coho listing under CESA is referenced in the Implementation/Action Plan document. All notation and/or reference to Coho Recovery proposed actions (timber harvest and well as other policy) is absent in terms of any nexus with enforceable language.

**Threatened and Impaired Rules (FPRs):** These regulations are currently in place in the Forest Practice Rules and are intended to address beneficial use issues related to Forest Practices on listed/impaired watercourses. These interim rules are, for the most part, based on riparian protection practices for listed impaired water bodies and salmon bearing streams. CDF has stated that these regulations are, in themselves, sufficient to protect beneficial uses. There is no documentation to support this claim by CDF. However, these regulations are superior to the baseline of regulations that preceded the Threatened and Impaired Rules. The Board of Forestry is considering removing these regulations at this time.

Stream and Wetlands protection policy should, at a minimum, assure the maintenance of the Threatened and Impaired rules in areas of timber harvest operations.

**Forest Practice Rules proposed language changes proposed by the NCRWQCB to the Board of Forestry (in several iterations):** These proposed rules changes, written to address

failure of the FPRs to protect beneficial uses, contain enforceable language that would produce positive changes towards attaining WQS.

**Implementation Proposal submitted to the NCRWQCB for the Garcia River TMDL by Coast Action Group:** This proposal was submitted to the Regional Board as suggestions for rules imposition for beneficial uses. Recommendation for riparian protection in areas of timber harvest can be referred to in this document to be found in the Garcia TMDL for Sediment Implementation file.

The discussion in all of the above referenced documents indicate: 1) Areas of failure of the Forest Practice Rules to address protection of beneficial uses, 2) Areas of necessary correction of Forest Practice land use that will show positive trends, via rules (currently in place or suggested) for use in guiding implementation planning - with some assurance of trends towards attaining WQS (for both Temperature and Sediment). Within all of these documents there is a significant (striking) degree of similarity in the description of riparian protection actions necessary to be taken as enforceable guidelines for timber harvest activity on impaired waters of north coast watersheds.

## **Implementation**

It is clear that policy development should develop new Basin Plan Objectives as Riparian and Wetland Protection Policy. Some recommendations for implementation have been made - above. Use of WDRs, and/or Conditional Waivers for riparian and wetland protections can work if the wording is sufficient to protect the resource.

The Regional Board can also apply protective policy to City and County Stormwater NPDES permits. Development of such policy will give direction to the County and municipal governing bodies for the development of zoning code and ordinance that can address riparian and wetland protection issues.

TMDLs (both State and EPA promulgated), as stated above, currently do not have adequate riparian and wetland protection policy included, as enforceable language, in the TMDLs. Only the Garcia River TMDL has some policy for riparian protection and it seems to be working well. TMDL successes, for those approved and waiting approval, is dependent on progress in the development of riparian and wetland protection policy.

## **Economics**

Economic analysis for the implementation of projects for water quality resource protection is difficult. It is almost impossible to determine the costs over the range of possible actions that may need to be taken. Variability of range of actions is unknown and almost impossible to estimate. Assessing monetary value to accrued benefits of such policy is similarly vague. Their are accrued benefits to near stream landowners, fisher people, water users, recreationists, fish and wildlife values that would have to be accounted for. What is the value of clean water?

The bottom line is it is the responsibility of the Regional Board, under State Water Code and the regional Basin Plan, to take action that assures the protection of Beneficial Uses and attainment of Water Quality Objectives.

## **CEQA**

Regional Board is responsible to provide sufficient environmental review to comply with CEQA. This would necessarily include consistency analysis with other legal mandates (e.g. Cal Water Code, Alternatives Analysis, DFG Code, federal CWA).

Cal Water Code Section 13242 specifies the necessary attributes of a Water Quality Control Plan with: 1) Descriptions of Actions that will attain Water Quality Objectives, 2) A timeline for implementation of the described actions, 3) Monitoring to assure compliance.

This proposed project must comply with the above by the use of reasonable and science based mitigations that will, eventually, assure attainment of WQS.

## **Voluntary Programs**

Voluntary programs that meet standards set by the Regional Board, comply with Basin Plan standards and objectives, and will assure progress towards WQS attainment should be considered. Such programs (e.g. Ranch Plans, Fish Friendly Farming) should be reviewed for the necessary attributes for compliance, and if they do comply, be accepted as a duly authorized implementation action.

Presented to the Regional Water Quality Control Board - Region 1, by:

Alan Levine  
For Coast Action Group

Attachment: Brinson, Mark M. Changes in the Functioning of Wetlands Along Environmental Gradients, WETLANDS, Vol. 13, No. 2, Special Issue, June 1993, pp 65-74

## **REFERENCES**

EPA promulgated Total Maximum Daily Loads for the Albion, Eel, Noyo, Gualala and other north coast Rivers.

State of California promulgated Total Maximum Daily Loads and Action Plans for the Garcia, Scott, and Shasta Rivers.

Brown, L. R., P. B. Moyle, and R. M. Yoshiyama. 1994. Historical decline and current status of coho salmon in California. *N. Am. J. Fish. Mgt.* 14(2): 237-261.

Chapman, D. W. 1988. Critical review of variables used to define effects of fines in redds of large salmonids. In: *Transactions of the American Fisheries Society* 117. Pages 1-25

Executive Officer's Summary Report, Regional Water Quality Control Board, North Coast Region, Nov. 27, 2001

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**Subject: Riparian and Wetlands System Protection Policy - Scoping**

**General**

Coast Action Group appreciates that the State Water Resources Control Board recognizes the necessity for taking such action as described in the proposed project, Riparian and Wetlands Protection Policy, and making an effort to move forward with such policy. Development of such policy is indicated by the acknowledged loss and degradation of wetlands and near stream riparian areas leading to a loss in water quality - non-attainment of Water Quality Standards resulting in the listing many water bodies as impaired - State of California Impaired Water Quality Limited Segments/CWA 303(d) list.

The Regional, and State, Water Quality Control Board(s) have the responsibility to manage the State's water resources to meet Water Quality Objectives and protect the Beneficial Uses described in the Basin Plan(s). Impaired listing status and degraded resources necessitate action to address the issue of attainment of desired goals.

The regional planning bodies, Counties and Cities in Region 1, have not successfully addressed issue through their own regional planning mechanisms (i.e. General Plans and GP updates, and Zoning Code, Ordinance, Stormwater Plans, and NPDES permits). The these planning bodies have sought (they say) guidance from the State Water Board and Regional Board(s) in the development of stream and wetland protection policy. Policy, definitions, and criteria developed by the SWRCB and Regional Boards to protect wetlands and riparian areas would serve to clarify what actions these planning bodies should employ regarding the management these resources in their specific areas of responsibility. These actions by the SWRCB and Regional Boards can also serve to provide standards and criteria for all land use types that can have effect and water quality and wetland values as a result of their specific use.

Given the fact that, both, the State and Regional Water Boards implement legal requirements to protect wetlands and riparian areas, the efficiency and effectiveness of these requirements could be improved to increase the overall level of water quality protection in the state by the

promulgation of a statewide Wetland and Riparian Area Protection Policy with a framework of action where both State and Regional Boards had policy development responsibility.

It is of concern, with the diverse and varying needs of individual regions that uniform and baseline policy to protect riparian areas and wetlands for one region would be problematic in establishing appropriate policy for all regions. (i.e. temperate rain forest and riverine and wetland protections on the north coast might vary greatly for protections uniquely designed for the more arid regions). Thus, it is suggested that the SWRCB develop definitions and set a “framework for action” allowing the Regional Boards to address the specific design of protections unique and workable for their respective regions.

I would be appropriate for that State Water Board to develop some policy (as outlined in the Information Paper and discussed below) while allowing Regional Boards to establish specific protection policy, by Basin Plan Amendment, that would address the specific needs and conditions of their respective regions.

The State Board would promote wetland and riparian protection by addressing the following issue(s):

- Lack of clarity in the existing regulatory framework for protecting those wetlands and riparian areas that are no longer regulated under the federal Clean Water Act (CWA) due to recent federal court cases that have limited the extent of federal jurisdiction and increased the relative role and importance of the state’s independent water quality programs and authorities.
- Lack of statewide consistency in the definition of wetlands and riparian areas, to ensure protection of beneficial uses under the California Water Code.
- Lack of statewide consistency in definitions of beneficial uses for wetland and riparian area functions (e.g., pollutant removal, floodwater retention, and habitat connectivity) and lack of consistent statewide requirements for evaluating the condition of wetland and riparian area resources. Condition assessments are necessary for determining potential impacts from discharges and other activities on wetland and riparian area water quality and associated beneficial uses; and for determining the actions that are necessary to avoid, minimize, and mitigate any potential impacts to protect wetland and riparian resources.

Improvements to these regulatory areas and the need for additional Wetland and Riparian Area Protection Policy are further outlined below:

#### Conditions of Wetlands and Riparian Areas in California

- Wetlands and riparian areas are among the state’s most valuable, most heavily impacted, and most threatened natural resources. They support a variety of beneficial uses and provide important water quality functions, including pollutant removal, flood attenuation, and habitat connectivity (State Water Board 2003).
- California has lost an estimated 91 percent of its historic wetland acreage, the highest loss rate of any state (Dahl 1990). Similarly, California has lost between 85 and 98 percent of its historic riparian areas (RHJV 2004).
- Loss of wetlands and riparian areas in the state has led to water quality impairments. For example, according to the proposed 2006 federal CWA section 303(d) list of water quality

limited segments (State Water Board 2006), riparian disturbance is believed to be a contributing factor to impairment in 76 percent of impaired watersheds in the North Coast Region. This includes 86 percent of all temperature impairments and 75 percent of all sediment impairments in the North Coast Region.

- The State Water Board funded a 2006 study of permitted wetland impacts and mitigation (Ambrose et al. 2006) which revealed that wetland acreage has largely been preserved in compliance with the state's "No Net Loss" Policy for Wetlands. However, on average the quality of created, restored, and enhanced wetlands achieved through mitigation was lower than the quality of intact, reference wetlands, suggesting that projects conducted in wetlands, as currently permitted, are contributing to a net loss of wetland functions and values.

### **Federal Role**

Due to recent court rulings and changes in the EPA's and U.S Army Corps incentive and ability to regulate, the State Board should develop and clarify responsibility and definitions that are not totally reliant on the Federal framework.

The USACE's 1987 Wetland Delineation Manual (USACE 1987), which is used to interpret the federal wetland definition in the field, does not recognize all wetlands in California. For example, the USACE's manual requires that an area exhibit certain soil characteristics commonly associated with wetlands, but some wetland types, such as mudflats and sand bars, are unlikely to develop these characteristics due to their frequent disturbance regimes or substrate materials, even though they exhibit other physical, chemical, and biological characteristics associated with wetlands (NRC 1995). Additionally, some wetlands in California may not develop the vegetation characteristics required by the USACE's manual due to their specific chemical or physical characteristics, such as high sulfide soils that cause vegetation mortality (NRC 1995).

### **State's Role**

The California Water Code applies to "waters of the state," which are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code § 13050(e)). Waters of the state include waters of the United States, but also include those waters excluded from federal jurisdiction. California should not limit its authority to the federal guidelines and/or limitations of the SWANCC decision.

The U.S. Supreme Court emphasized in its decision that it is within the states' purview to regulate impacts to waters outside of federal jurisdiction using their independent authorities under state law. Waters exempted from the federal CWA by the SWANCC decision are still subject to California law and that "California Water Code section 13260 requires 'any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the state to file a report of discharge (an application for waste discharge requirements).'"

### **Improving the State's Wetlands and Riparian Areas Protections**

There is a recognized link regarding properly functioning wetlands and riparian areas with maintaining and/or meeting water quality objectives and protecting beneficial uses. In fact, most impaired waterbodies attain their impaired conditions, in part, due to lack of properly functioning riparian and wetland areas. Attainment of WQS in regards to impaired conditions, to a large extent, requires protection and/or restoration of improperly functioning wetlands and riparian conditions.

California Water Code applies to a broader set of waters than does the federal CWA, but the full extent of these waters is not always clear, particularly with respect to wetlands and riparian areas.

State Water Board has not yet adopted its own definition of wetlands. Several of the Regional Water Boards have adopted regional wetland definitions, and this lack of consistency has complicated the statewide identification of wetlands. Wetlands not recognized under the federal definition are still protected by the State and Regional Water Boards under the California Water Code through Water Quality Control Plans (Basin Plans) and applicable statewide plans and policies, including the “No Net Loss” Policy.

Governor Schwarzenegger’s Action Plan for California’s Environment directed state agencies to fill any gaps in wetlands protection. The State Water Board’s 2003 Report to the Legislature on Regulatory Steps Needed to Protect and Conserve Wetlands Not Subject to the Clean Water Act (State Water Board 2003) identified several such gaps in wetland and riparian area protections, which are described below, and outlined a series of steps needed to fill these gaps. The State Water Board’s 2004 Work plan (State Water Board 2004b) further memorialized these steps by establishing tasks necessary to improve protection of wetlands and riparian areas in the state.

State Water Board has not established a statewide definition of riparian areas, which makes identification and protection efforts inconsistent. In addition to the lack of statewide definitions for wetlands and riparian areas, consistent definitions of their beneficial uses have not been established statewide. The 2004 Work plan included a task to develop beneficial use definitions for wetland-related functions to “provide a Statewide regulatory standard to systematically protect wetland-related functions (e.g., pollutant removal, floodwater retention, and habitat connectivity) not explicitly included in the existing list of [beneficial uses].” The State Water Board has not yet adopted statewide wetland and riparian area beneficial uses, although several of the Regional Water Boards have adopted regional wetland and riparian area beneficial uses, including uses for Water Quality Enhancement (

### **Regional Board Role**

Consistent requirements to regulate impacts from discharges and other activities on wetlands and riparian areas have not been established. The 2004 Work plan includes a task to “provide a State policy framework” to address the impacts of dredge or fill material discharges that is “at least as protective as the federal requirements applicable to fill and dredged discharges to waters of the [United States].” Under this “framework” Regional Boards can provide that policy specifically needed to address impacts on wetlands and riparian areas from other discharges and activities, including discharges of pollutants other than dredge or fill material (e.g., nutrients); hydromodification; land and vegetation clearing activities; and invasive species.

The North Coast and San Francisco Bay Regional Water Boards currently are developing a “Stream and Wetlands System Protection Policy,” which will be proposed as Basin Plan amendments in those regions. The Regional Water Boards’ amendments are intended to establish regional wetland and riparian area protections.

While the Regional Boards can develop policy to be amended into their respective Basin Plans that address the specific need for riparian and wetland protection fitted to their respective regions, the development of a State Water Board Wetland and Riparian Area Protection Policy addressing a framework of action and definitions would give a statewide regulatory context to the efforts of Regional Water Boards to protect wetland and riparian areas.

### **APPROPRIATE ALTERNATIVE**

Considering all reasonable choices and the need to recover impaired water bodies as well as protect existing beneficial uses it seems that a modified Alternative #4 is the most appropriate choice.

The SWRCB should Develop a New State Policy to Regulate a Variety of Discharges and Activities That Impact Wetlands and Riparian Areas

#### Discussion of Alternative 4

Under Alternative 4, the State Water Board would develop a new state policy and “framework of action” to regulate a variety of discharges and activities that impact wetlands and riparian areas; including, but not limited to, dredge or fill material discharges; discharges of other pollutants (e.g., nutrients); hydromodification; land and vegetation clearing activities; and invasive species. This action would provide clarification of responsibility and definitions and the Regional Boards would be responsible to adopt policy to provide a minimum level of protection to all waters of the state from these discharges and activities. With respect to dredge or fill material discharges, Alternative 4 would provide a level of protection that likely would be higher than the level of protection currently provided to those waters through the section 401 and 404 programs (for federal jurisdictional waters) and existing state policies (for all waters).

Alternative 4 would neither override any existing Regional Water Board Basin Plans, nor limit the authorities of the State and Regional Water Boards under the California Water Code and federal CWA to protect wetlands, riparian areas, and other waters of the state.

#### Wetland and Riparian Area Protection Policy Scoping Document Needs Addressed by Alternative 4

Alternative 4 would address all of the identified needs for dredge or fill discharges and other discharges through policy components, which are outlined in the next section:

- Lack of clarity in the existing regulatory framework for protecting those wetlands and riparian areas that are no longer regulated under the federal CWA.
- Lack of statewide consistency in the definition of wetlands and riparian areas.

- Lack of statewide consistency in definitions of beneficial uses and requirements for evaluating wetland and riparian area condition.

#### Policy Components Included in Alternative 4

- Definition of wetland that is fully protective of these waters, including wetlands that are not included in the federal regulatory definition, and recognizes their critical role in protecting water quality. The State Water Board is currently evaluating definitions of wetland as alternatives to the federal regulatory definition, including those used by the California Department of Fish and Game and the California Coastal Commission.

- Definition of riparian areas that is fully protective of these waters and recognizes their critical role in protecting water quality. The State Water Board is currently evaluating definitions of riparian areas, including a definition developed by the National Research Council, which has been proposed for use by the Resources Agency in the Statewide Wetland Inventory.

- Consistent definitions of statewide beneficial uses for wetland and riparian area functions (e.g., pollutant removal, flood attenuation, and habitat connectivity).

- Comprehensive “framework of action” where individual Regional Boards would adopt customize policy for protecting wetlands and riparian areas from the impacts of a variety of discharges and activities, including:

- - - - Dredge or fill material discharges;
- Discharges of other pollutants (e.g., nutrients);
- Hydromodification;
- Land and vegetation clearing activities; and
- Invasive species.

- Framework of action (provided by Regional and State Water Boards) to include minimum statewide requirements for discharges and activities that may impact wetlands and riparian areas. These requirements would address:

Cumulative impacts: The requirements would include a framework to predict cumulative impacts resulting from discharges and activities that impact wetlands and riparian areas and consideration of this information during the permit decision-making process.

- Functional assessment: The requirements would include a functional assessment methodology using tools such as CRAM for wetlands and riparian areas to determine potential impacts of a discharge or activity.

- Mitigation sequencing and compensatory mitigation requirements: The requirements would establish that impacts from discharges and activities that impact wetlands and riparian areas be avoided if possible and that all unavoidable impacts be minimized to the maximum extent practicable. Compensatory mitigation would be required for all impacts. The amount of compensatory mitigation would be determined based on the functions lost at the impact site and the proposed method of mitigation, including the location and timing of the mitigation project.

- Performance standards: The requirements would include project performance standards to improve mitigation success. Performance standards would incorporate the recommendations of the State Water Board’s 2006 Compensatory Mitigation Compliance Study, including:

Measuring parameters related to functions, services, and values lost at the discharge site and gained at the mitigation site;

Establishing success criteria for functions of wetland and riparian mitigation projects;

Improving mitigation requirements in permits;

Improving mitigation progress tracking and data collection and management;

Improving clarity of permits;  
Measuring and evaluating progress on the state's no net loss goal for wetlands more effectively; and  
Improving permitting coordination between agencies.

Implementation of Alternative 4:

- Beneficial uses and water quality objectives would be met according to existing requirements in Regional Water Board Basin Plans, state plans, and policies.
- Discharges of dredge or fill material would be prohibited unless authorized by a WDR, waiver of WDR, or section 401 certification.

All above requirements to comply with Section 13242 Cal Water Code - where conditions approved would be subject to criteria allow for reasonable expectation of successfully protecting beneficial uses and/or properly functioning wetland and riparian resources, where there would be timelines for implementation of protective standards, and where such implementation is monitored for effectiveness.

**Discussion - Below is some discussion of the regionally specific issues, in this case Regional, that support development of riparian and wetland protective policy by Regional Boards - where north coast river conditions are used as an example.**

**North Coast Rivers - Impaired Waterbodies and Basin Planing - Need for protective riparian and wetland protective policy.**

Most of the north coast rivers are listed impaired for the pollutants sediment, temperature, nutrients, and the lack of Dissolved Oxygen. There are many other north coast streams that are impaired but are not listed. These impaired listings, where Beneficial Uses are not being supported, are a result of inappropriate land use. In many cases (at least 50%) on these impaired rivers forest practices is the primary land use and degradation (riparian loss) from inappropriate practices is the major contributor to failure of riverine function. On the remainder of the impaired rivers it is a combination of poor timber harvest practices, poor agricultural practices (grazing and growing), and urbanized land use with poor pollution controls that has contributed to diminished riparian capacity.

The EPA promulgated TMDLs on the Albion, Gualala, Noyo, Ten Mile, and other rivers on the north coast has documented impacts, including loss of riparian function, on these waterbodies. State promulgated TMDLs for the Garcia, Scott, and Shasta Rivers have also provided such documentation. However, none of these TMDLs or approved Action Plans have set appropriate criteria and objectives and land use guidelines to support attainment of riparian function - or - improvement of riparian function.

Stream and Wetlands protection policy should take the findings of these TMDLs to make determinations regarding the policy that will be issued for such resource protection.

**Anti-degradation Language can be used as a reference and support actions needed to protect riparian function and wetlands.**

This policy is consistent with Basin Plan Objectives and Anti-degradation policy which states:

***Basin Plan Anti-degradation Policy:*** "Controllable water quality factors shall conform to the water quality objectives contained [in the Basin Plan]. When other factors result in the degradation of water quality beyond the levels or limits established [in the Basin Plan] as water quality objectives, then controllable factors shall not cause further degradation of water quality. Controllable water quality factors are those actions, conditions, or circumstances resulting from man's activities that may influence the quality of waters of the State and that may reasonably be controlled."

Riparian attributes are both measurable and controllable factors that can be addressed via the proposed Stream and Wetlands System Protection Policy.

The fact that degradation that has occurred under existing Basin Plan prohibitions indicates that additional prohibitions (control language) are necessary. This is supported by the findings of the above mentioned TMDLs indicating that specific land use practices are responsible for diminished riparian and water quality values. Also, the fact that recently approved Shasta and Scott River TMDLs and Action Plans are dependent on the development of such policy to be truly functional.

### **Limiting Factors and Desired Riparian Conditions**

In consideration of why such policy development is needed (aside from the fact that WQ values are not improving and are documented to be not sufficiently protected) it would be helpful to develop a matrix of Limiting Factors effecting near stream health and also a similar matrix for Desired Conditions. Such matrix would be helpful in near stream condition analysis and policy development. Such matrix can support modeling the relationship, interaction, of factors involving the stream channel, flood plain, and riparian function. Comparison of desired condition to actual function can be made with findings relevant to the causal relationships. Attributes of such matrix can be useful in developing new standards for Water Quality Objectives (numeric and narrative). Hydrologic issues can be linked to such matrix and related policy and language needs for policy development and addressing needs for new Water Quality Objectives (and/or prohibitions) to be amended into the Basin Plan.

This discussion is applicable to all attributes: **Riparian Vegetation and Buffer Width** - effects: stabilization, filtration, habitat, temperature and micro-climate, filtration; **Flood plain** - effects: storage capacity, changes in hydrology and related effects up and down the system, habitat, ground water storage, interface with instream flows, **Active Channel** - effects: alteration and changes in dynamics, **Hydrology** - effects: land use and water flow changes, peak flows (changes in hydrologic incidence and time [lag time] to peak flow).

Assessment of stream habitat conditions would benefit from both a Limiting Factors and a Desired Conditions matrix.



## **BMPs**

The above mentioned regional planning authorities and mechanisms often mention use of BMPs to protect water quality values. However, a description of what actually constitutes a BMP is usually missing in the planning authority's lexicon.

**Recommendation: The Regional Board(s) provide a description of what BMPs for various land use operations that potential effect streams and wetlands might look like.**

Information for the BMP assessment or formulation can be obtained from:

"Riparian Setbacks: Technical Information for Decision Makers"  
[http://www.crwp.org/pdf\\_files/riparian\\_setback\\_paper\\_jan\\_2006.pdf](http://www.crwp.org/pdf_files/riparian_setback_paper_jan_2006.pdf)

"Riparian Buffer Width, Vegetative Cover, and Nitrogen Removal Effectiveness: A Review of Current Science and Regulations", <http://www.epa.gov/ada/download/reports/600R05118/600R05118.pdf>

**See also - Forest Practices specific discussion - below**

## **Forestry Practices**

It is unclear in the project description if the Stream and Wetlands Protection Policy is to cover areas of timber harvest operations. As noted, above and in many scientific studies, inappropriate timber harvest activity is responsible for water quality degradation through loss of riparian function. Recovery of water quality values, objectives, and beneficial use protection is dependent on sufficient riparian protection from further degradation.

**Please note, in reference to policy development discussion:** Report of the Scientific Review Panel On California Forest Practice Rules and Salmonid Habitat, Prepared for The Resources Agency of California and the National Marine Fisheries Service, comprised of a selected panel of scientists, 1999, indicates that "the Forest Practice Rules" and their administration by the California Department of Forestry "do not protect the beneficial uses of water." "Silviculture is the leading source of impairment to water quality in the North Coast of California. Related to these water quality problems, California has a number of species, in particular salmon, that are endangered threatened or otherwise seriously at risk, due in very significant part to forestry activities that impair their spawning, breeding and rearing habitat." (Findings for the California Coastal Non-point Program and CZARA Action Plan, USEPA/NOAA, 1999) A Scientific Basis for the Prediction of Cumulative Watershed Effects, UC, Berkeley, June 2001, and finally the Final Report on Sediment Impairment and Effects on the Beneficial Uses of Elk River and Stitz, Bear, and Jordan Creeks, Concur, 2002, also support the findings noted above. All of these noted scientific reviews indicate the Forest Practice Rules, including projects related to small landowners and Non-Industrial Timber Plans, are deficient in cumulative impacts analysis and riparian protection and can not be counted on to protect the beneficial uses of water and meet Basin Plan water quality objectives.

These documents, noted above, not only indicate impairment from current and historic forest practices, they provide analysis and prescriptive measures to be taken to address attainment of WQS. These studies indicate that level of disturbance is a major factor and needs to be addressed if we are ever going to meet WQS. These documents also indicate that loss of riparian function can be attributed to inadequate protections currently in the Forest Practice Rules.

Other references to review for appropriate regulatory guidelines are:

**Garcia River TMDL and Conservation Fund Lands** - The Garcia River TMDL for Sediment and Action Plan has shown a high level of success because the conditions and activity controls that will provide riparian and wetland protection are clearly stated and enforceable (as adopted into the Basin Plan). The Garcia River is recovering due to the implementation of such policy. Also, on recently purchased lands (24,000 acres - 42% of the forested watershed) by the Conservation Fund the wetland and riparian protection policy is manifested by creating riparian protection zones equaling 33% of the entire land base where the only timber harvest activity that can take place are actions that support improved riparian function. This is a testament to the importance of policy development to protect near stream environments.

**Coho Recovery Guidelines (DFG)**- Regulations (not approved) specifically referenced for Timber Harvest activity in the form of an Incidental Take Permit (Draft 2112 - rules). The Coho listing under CESA is referenced in the Implementation/Action Plan document. All notation and/or reference to Coho Recovery proposed actions (timber harvest and well as other policy) is absent in terms of any nexus with enforceable language.

**Threatened and Impaired Rules (FPRs)**: These regulations are currently in place in the Forest Practice Rules and are intended to address beneficial use issues related to Forest Practices on listed/impaired watercourses. These interim rules are, for the most part, based on riparian protection practices for listed impaired water bodies and salmon bearing streams. CDF has stated that these regulations are, in themselves, sufficient to protect beneficial uses. There is no documentation to support this claim by CDF. However, these regulations are superior to the baseline of regulations that preceded the Threatened and Impaired Rules. The Board of Forestry is considering removing these regulations at this time.

Stream and Wetlands protection policy should, at a minimum, assure the maintenance of the Threatened and Impaired rules in areas of timber harvest operations.

**Forest Practice Rules proposed language changes proposed by the NCRWQCB to the Board of Forestry (in several iterations)**: These proposed rules changes, written to address failure of the FPRs to protect beneficial uses, contain enforceable language that would produce positive changes towards attaining WQS.

The discussion in all of the above referenced documents indicate: 1) Areas of failure of the Forest Practice Rules to address protection of beneficial uses, 2) Areas of necessary correction of Forest Practice land use that will show positive trends, via rules (currently in place or suggested) for use in guiding implementation planning - with some assurance of trends towards attaining WQS (for both Temperature and Sediment). Within all of these documents there is a significant

(striking) degree of similarity in the description of riparian protection actions necessary to be taken as enforceable guidelines for timber harvest activity on impaired waters of north coast watersheds.

## **Implementation**

It is clear that policy development should include new Basin Plan Objectives as Riparian and Wetland Protection Policy. Some recommendations for implementation have been made - above. Use of WDRs, and/or Conditional Waivers for riparian and wetland protections can work if the wording is sufficient to protect the resource.

The Regional Board can also apply protective policy to City and County Stormwater NPDES permits. Development of such policy will give direction to the County and municipal governing bodies for the development of zoning code and ordinance that can address riparian and wetland protection issues.

TMDLs (both State and EPA promulgated - Garcia River TMDL and Action plan not included), as stated above, currently do not have adequate riparian and wetland protection policy included, as enforceable language, in the TMDLs. Only the Garcia River TMDL has some policy for riparian protection and it seems to be working well. TMDL successes, for those approved and waiting approval, is dependent on progress in the development of riparian and wetland protection policy.

## **Economics**

Economic analysis for the implementation of projects for water quality resource protection is difficult. It is almost impossible to determine the costs over the range of possible actions that may need to be taken. Variability of range of actions is unknown and almost impossible to estimate. Assessing monetary value to accrued benefits of such policy is similarly vague. Their are accrued benefits to near stream landowners, fisher people, water users, recreationists, fish and wildlife values that would have to be accounted for. What is the value of clean water?

The bottom line is it is the responsibility of the Regional Board, under State Water Code and the regional Basin Plan, to take action that assures the protection of Beneficial Uses and attainment of Water Quality Objectives.

## **CEQA**

The SWRCB and Regional Boards are responsible to provide sufficient environmental review to comply with CEQA. This would necessarily include consistency analysis with other legal mandates (e.g. Cal Water Code, Alternatives Analysis, DFG Code, federal CWA).

Cal Water Code Section 13242 specifies the necessary attributes of a Water Quality Control Plan with: 1) Descriptions of Actions that will attain Water Quality Objectives, 2) A timeline for implementation of the described actions, 3) Monitoring to assure compliance.

This proposed project must comply with the above by the use of reasonable and science based mitigations that will, eventually, assure attainment of WQS.

### **Voluntary Programs**

Voluntary programs that meet standards set by the Regional Board, comply with Basin Plan standards and objectives, and will assure progress towards WQS attainment should be considered. Such programs (e.g. Ranch Plans, Fish Friendly Farming) should be reviewed for the necessary attributes for compliance, and if they do comply, be accepted as a duly authorized implementation action.

Presented to the Regional Water Quality Control Board - Region 1, by:

Alan Levine  
For Coast Action Group

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